

REMARKS

Reconsideration of this Application is respectfully requested. Upon entry of the foregoing amendment, claims 1, 3-19, and 21-26 are pending in this application with claims 1, 13, and 18 being the independent claims, and claims 5, 7-12, 15-17 and 22-25 being withdrawn. The Applicants respectfully request that the Examiner reconsider and withdraw all outstanding rejections.

Claim Rejections

Claims 1, 2, 13, 14, 18 and 19 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent Pub. No. 2002/0019627 to Maguire et al. (“Maguire”). Claims 3, 4, 6, 20 and 21 were rejected under 35 U.S.C. 103 (a) as being unpatentable over Maguire.

Claim 1 and its Dependent Claims

Claim 1 has been amended to recite “the balloon configured to be disposed within a tissue cavity previously-formed by removal of a tissue mass and configured to expand to a size associated with the tissue cavity to ablate margin tissue associated with the tissue cavity.” The Examiner asserts that it is inherent in Maguire that the balloon in the expanded configuration has a size associated with a previously-formed tissue cavity. The Applicants respectfully disagree with this assertion. Maguire discloses an ablation device for treatment within a pulmonary vein that includes an ablation member 104 having a balloon 106, and an ablation element 108 coupled to the balloon 106. Maguire fails to disclose or suggest the balloon 108 being capable of expanding to a size of a previously-formed tissue cavity formed by the removal of a tissue mass as recited in claim 1.

Maguire discloses that its balloon can take on the shape of a body lumen or body space (see ¶¶ [0195] and [0196]). As defined in the specification, a body lumen and a body space each refer to existing anatomical structures such as a cardiac chamber or uterus (body space) (see ¶ [0089]), or a blood vessel or pulmonary vein (body lumen)

(see ¶ [0090]). Thus, Maguire only discloses use of its device within an existing or naturally-occurring anatomical structure, not within a tissue cavity previously-formed by removal of a tissue mass to ablate margin tissue associated with the tissue cavity, as recited claim 1.

Accordingly, at least for this reason Applicants respectfully submit that claim 1 is allowable. Based at least upon their dependence from claim 1, claims 3-4 and 6 are also allowable.

Claim 13 and its Dependent Claims

Claim 13 has been amended to recite “percutaneously disposing the balloon while in a collapsed configuration into a tissue cavity previously-formed by removal of a tissue mass.” For similar reasons as stated above for claim 1, Maguire does not disclose or suggest the method recited in claim 13 as amended. Specifically, Maguire does not disclose or suggest the use of its device within a tissue cavity that has been previously-formed by the removal of a tissue mass. As stated above, Maguire discloses the use of its device to ablate tissue within a naturally-occurring body lumen or body space, and specifically within a pulmonary vein. Maguire does not disclose or contemplate disposing its device within a tissue cavity that has been formed by the removal of a tissue mass as recited in claim 13 as amended.

In addition, new dependent claim 26 recites “wherein the applying includes applying the radio-frequency signal to the conductive portion of the balloon such that heat from the conductive portion of the balloon is produced to ablate at least a portion of a margin tissue associated with the tissue cavity.” Maguire is entirely silent as to treatment of “margin tissue.”

Maguire also does not disclose or suggest “circulating a fluid within the balloon, . . . having a temperature less than a temperature of the conductive material of the balloon,” as recited in dependent claim 14. The Examiner references paragraph [0136] in regard to this claim; however, paragraph [0136], and, in fact Maguire as a whole, is

entirely silent as to a fluid in the balloon having a temperature less than the temperature of the conductive material.

Accordingly, at least for these reasons Applicants respectfully submit that claim 13 is allowable. Based at least upon their dependence from claim 13, claims 14 and 26 are also allowable.

Claim 18 and its Dependent Claims

Claim 18 has been amended to recite “the at least one electrode of the balloon includes a first conductive portion and a second conductive portion separated by an insulation portion from a plurality of insulation portions.” The Examiner asserts that it would have been obvious to one of ordinary skill in the art to provide a plurality of conductive and insulative portions. The Applicants respectfully disagree with this assertion.

The first and second conductive portions separated by the insulation portion recited in claim 18 are arranged to produce an RF field between the conductive portions when energized. Unlike the recitation of claim 18, however, the insulators of Maguire are thermal insulators disposed on an outer surface of a thermally conductive balloon to insulate all but a ring or band of the balloon. The insulators of Maguire are merely used to insulate portions of the thermally conductive balloon to provide a circumferential ring of ablation.

Thus, claim 18 does not merely recite a plurality of conductive and insulative portions as asserted by the Examiner, but instead recites a specific positioning of the first and second conductive portions in relation to an insulation portion to achieve a specific function.

Accordingly, at least for this reason Applicants respectfully submit that claim 18 is allowable. Based at least upon their dependence from claim 18, claims 19 and 21 are also allowable.

CONCLUSION

All of the stated grounds of rejection have been properly traversed or rendered moot. The Applicants therefore respectfully request that the Examiner reconsider all presently outstanding rejections, and that they be withdrawn. The Applicants believe that a full and complete response has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment is respectfully requested.

Dated: January 18, 2007

COOLEY GODWARD KRONISH LLP
ATTN: Patent Group
1200 19th Street, NW, 5th Floor
Washington, DC 20005-2221
Tel: (703) 456-8000
Fax: (202) 842-7899

Respectfully submitted,
COOLEY GODWARD KRONISH LLP

By:

Christopher R. Hutter (Reg. No. 41,087)
Nancy A. Vashaw
Reg. No. 50,501 *for*